#### RECEIVED CENTRAL FAX CENTER

## SEP 2 5 2007

FAX TRANSMISSION

DATE:

September 25, 2007

PTO IDENTIFIER:

**Application Number** 

10/719,564-Conf. #3551

**Patent Number** 

Inventor:

Mitsuharu IMASEKI et al.

MESSAGE TO:

US Patent and Trademark Office

FAX NUMBER:

(571) 273-8300

FROM:

LAHIVE & COCKFIELD, LLP

Anthony A. Laurentano

PHONE:

(617) 994-0753

Attorney Dkt. #:

NGW-013

PAGES (Including Cover Sheet): 13

CONTENTS:

Response to Office Communication (2 pages)

Translation of Examination Report (5 pages)

Copy of Supplemental Information Disclosure Statement dtd 8/3/2007 (2 pages)

Copy of PTO Form SB/08 (1 page)

Copy of English abstract for Citation B1 (1 page)

Certificate of Transmission (1 page)

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (617) 994-0753 and send the original transmission to us by return mail at the address below.

This transmission is intended for the sole use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution or duplication of this transmission by someone other than the intended addressee or its designated agent is strictly prohibited.

#### LAHIVE & COCKFIELD, LLP

One Post Office Square, Boston, Massachusetts 02109-2127 Telephone: (617) 227-7400 Facsimile: (617) 742-4214

# CENTRAL FAX CENTER

### SEP 2 5 2007

PTO/SB/97 (09-04)
Approved for use through 07/31/2008. OMB 0651-0031
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application No. (if known): 10/719,564

Attorney Docket No.: NGW-013

## Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office.

September 25, 2007 Date

Signature

Anthony A. Laurentano Typed or printed name of person signing Certificate

38,220 Registration Number, If applicable (617) 994-0753

Telephone Number

Note:

Each paper must have its own certificate of transmission, or this certificate must

identify each submitted paper.

Response to Office Communication (2 pages)

Translation of Examination Report (5 pages)
Copy of Supplemental Information Disclosure Statement dtd 8/3/2007 (2 pages)

Copy of PTO Form SB/08 (1 page)

Copy of English abstract for Citation B1 (1 page)

# CENTRAL FAX CENTER

SEP 2 5 2007

Docket No.: NGW-013

(PATENT)

t hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimite to the Patent and Trademark Office, facsimile no. (571) 273-8300 at MS Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1460, on the date shown below. Dated: September 25, 2007 Signature:

# IN THE UNITED STATÉS PATENT AND TRADEMARK OFFICE

(Anthony A/Laurentano)

In re Patent Application of: Mitsuharu Imaseki et al.

Application No.: 10/719,564

Filed: November 20, 2003

COOLING STRUCTURE FOR FUEL CELL For:

**VEHICLE** 

Confirmation No.: 3551

Art Unit: 1745

Examiner: M. Ruthkosky

## RESPONSE TO OFFICE COMMUNICATION

MS Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Communication received on August 31, 2007 from the U.S. Patent Office (Paper No. 20070824), Applicants' attorney obtained a translation of the Japanese Examination Report dated May 15, 2007 for corresponding Japanese Patent Application No. 2002-336689 and encloses a copy herewith for the Examiner's review. Also enclosed for the Examiner's convenience are copies of the Supplemental Information Disclosure Statement, PTO Form SB/08, and English abstract of Citation No. B1: JP 06-239147, all submitted to the U.S. Patent Office on August 3, 2007.

## Notification of Reason for Refusal

Issue Date: May 15, 2007

Patent Application No. Patent application 2002-336689

Drafting Date

May 9, 2007

Examiner of JPO

9535 3D00 Haruyuki KANAMARU

Representative/Applicant Messrs. Masatake SHIGA

(and 5 others)

Applied Provision

Patent Law Section 29(2)

The application should be refused for the reason mentioned below. If the applicant has any argument against the reason, such argument should be submitted within 60 days from the data on which this notification was dispatched.

#### Reason

The inventions in the claims listed below of this application should not be granted a patent under the provision of Patent Law Section 29(2) since they could have easily been made by persons who have common knowledge in the technical field to which the inventions pertain, on the basis of inventions described in the publications listed below which were distributed, or inventions made available to public through an electric communication line, in Japan or foreign countries prior to the filing of the subject application.

Note

- Claims 1 6
- Cited documents
- 1. JP-A-2000-315513 (hereinafter, referred to as "first cited document".)
- 2. JP-A-06-239147 (hereinafter, referred to as "second cited document".)
- Remark

With regard to Claim 1

The cited document 1 discloses a cooling structure for a fuel cell vehicle, which comprises a fuel cell, a drive motor for driving the vehicle using the energy generated by the fuel cell, a first cooling flow passage for cooling the fuel cell using a first cooling medium cooled by a main radiator, and a second cooling flow passage for cooling the drive motor or a power control unit of the drive motor using a second cooling medium cooled by an auxiliary radiator. On the one hand, the cited document 2 discloses such a technique that a radiator is disposed in a central portion of a front surface of a vehicle body, and an inter cooler and an oil cooler are disposed on the front surface of the vehicle body in such a manner that their heat exchange surfaces are situated shifted in a vehicle-width direction so as to prevent them from being

overlapped with a heat exchange surface of the radiator. A person skilled in the art could easily arrive at an idea of realizing a configuration as shown in the invention of Claim 1 in the subject application, by applying the technique disclosed in the cited document 2 to the cooling structure for a fuel cell vehicle disclosed in the cited document 1.

#### with regard to Claim 2

The cited document 1 discloses a cooling structure for a fuel cell vehicle, which comprises a fuel cell, a drive motor for driving the vehicle using the energy generated by the fuel cell, a first cooling flow passage for cooling the fuel cell using a first cooling medium cooled by a main radiator, and a second cooling flow passage for cooling the drive motor or a power control unit of the drive motor using a second cooling medium cooled by an auxiliary radiator. On the one hand, the cited document 2 discloses such a technique that a radiator is disposed on a front surface of a vehicle body so as to extend substantially over a vehicle-width-direction entire area existing between a pair of right and left main frames respectively disposed along a back-and-forth direction of the vehicle body, and an inter cooler and an oil cooler are disposed on the front surface of the vehicle body in such a manner that they are situated outside the main frames. A person skilled in the art could easily arrive at an idea of realizing a

configuration as shown in the invention of Claim 1 in the subject application, by applying the technique disclosed in the cited document 2 to the cooling structure for a fuel cell vehicle disclosed in the cited document 1.

## With regard to Claim 3

The cited document 2 discloses such a technique that an inter cooler and an oil cooler are disposed in such a manner that their heat exchange surfaces face obliquely forwardly and outwardly.

## with regard to Claim 4

The cited document 2 discloses such a technique that a radiator is disposed in such a manner that its heat exchange surface faces obliquely forwardly and outwardly.

#### with regard to Claim 5

A person skilled in the art could arrive at an idea of disposing, between a main radiator and an auxiliary radiator, a seal member for closing a space existing between them.

# With regard to Claim 6

The cited document 2 discloses such a technique that an installation height of an inter cooler and an oil cooler is set lower than that of a radiator.

Record of the result of prior art search

• Technical field to be searched IPC B60K 11/04

This record is not a component of the reason for refusal.

If the applicant has any inquiry regarding content of this notification of reason for refusal, or wish for an interview, please make contact with Patent Examination Second Department, Transport, Haruyuki KANAMARU (TEL. 03(3581)1101 Extension 3339).



Express Mail Lebel No. EM 066425556 US Date

Dated: August 3, 2007

Docket No.: NGW-013 (PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Mitsuharu Imaseki et al.

Application No.: 10/719,564

Confirmation No.: 3551

Filed: November 20, 2003

Art Unit: 1745

Alt Ollit. 1743

For: COOLING STRUCTURE FOR FUEL CELL

Examiner: M. Ruthkosky

VEHICLE

MS Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

Dear Sir:

In accordance with 37 CFR 1.97, Applicants hereby make of record the following additional documents. A PTO Form SB/08 and a full copy of each of the documents required under 37 CFR 1.98(a)(2) accompany this statement.

Applicants have become aware of the following documents, cited in a Japanese Examination Report issued May 15, 2007, during the prosecution of Application No. 2002-336689, which corresponds to the above referenced application, and in accordance with 37 CFR 1.97(c) and (e)(1) or (b)(3), hereby submit these documents for the Examiner's consideration. These documents are cited on the enclosed PTO Form SB/08, and a copy of the Examination Report and of each document required under 37 CFR 1.98(a)(2) cited thereon are enclosed as well.

This statement is not to be interpreted as a representation that the cited documents are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any document herein be construed *per se* as a representation that

SEP 2 5 2007

Application No.: 10/719,564

07

Docket No.: NGW-013

such document is prior art. Moreover, Applicants understand the Examiner will make an independent evaluation of the cited documents.

Please note that Applicants' attorney does not include in this Supplemental Information Disclosure Statement reference JP-A-2000-315513 cited in the corresponding Examination Report. This reference was previously submitted in an Information Disclosure Statement to the U.S. Patent Office in this case on November 20, 2003.

This Information Disclosure Statement is filed after the mailing date of a Notice of Allowance, but before payment of the Issue Fee (37 CFR 1.97(d)). Applicants hereby petition that the Supplemental Information Disclosure Statement be considered.

I hereby certify, pursuant to 37 CFR 1.97(e)(1), that each item of information contained in this Supplemental Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Supplemental Information Disclosure Statement.

Please charge our Deposit Account No. 12-0080 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 12-0080, under Order No. NGW-013.

Dated: August 3, 2007

AAL/mch

Respectfully submitted,

Amhony A. Laurentano

Registration 36.: 38,220 LAHIVE & COCKFIELD, LLP

One Post Office Square

Boston, Massachusetts 02109-2127

(617) 227-7400

(617) 742-4214 (Fax)

Attorney/Agent For Applicant



Used in Lieu of PTO/SB/08A/B (Based on PTO 04-07 version)

Sub-	Substitute for form 1449/PTO			Complete if Known		
5008	didle for form 1448/P	10		Application Number	10/719,564-Conf. #3551	
INFORMATION DISCLOSURE				Filing Date	November 20, 2003	
	STATEMENT BY APPLICANT			First Named Inventor	Mitsuharu IMASEKI	
	· A · EIIIEII			Art Unit	1745	
	(Use as man)	y sheets as	necessary)	Examiner Name	M. Ruthkosky	
Sheet	1	of	1	Attorney Docket Number	NGW-013	

U.S. PATENT DOCUMENTS						
Examiner Cite Initials* No.¹ Number-Kind Code² (# known)		Publication Date MM-DD-YYYY	Name of Petentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>8</sup> (** known)	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Unes, Where Relevent Passages Or Relevent Figures Appear	T°
	B1	JP-6-239147	08-30-1994	Mazda Motor Corp.		Abstr.

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspfo.gov">www.uspfo.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WiPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. If Kind of document by the appropriate symbols as indicated on the document under WiPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine; journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²	
	C1	Japanese Examination Report for Application No. 2002-336689, dated May 15, 2007		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

( <del></del>	Date		
Examiner	Considered	1	
Signature	CONSIGNICA		

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

## PATENT ABSTRACTS OF JAPAN

(11)Publication number :

06-239147

(43) Date of publication of application: 30.08.1994

(51)Int.Cl.

B60K 11/04

(21)Application number: 05-047326

(71)Applicant: MAZDA MOTOR CORP

(22)Date of filing:

12.02.1993 (72)Inventor: FUJII YOSHIO

MARUTA TETSUYA

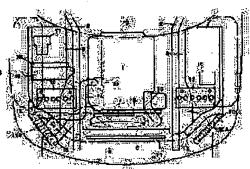
MATSUGU TAKASHI MUKAI YOSHIAKI

#### (54) FRONT SIDE STRUCTURE OF AUTOMOBILE

(57)Abstract:

PURPOSE: To cool a timing belt and the like provided at the front end of an engine by the running wind, as well as to increase the cooling efficiency of the intake air and to realize a small size of an intercooler, in an automobile.

CONSTITUTION: An intercooler 19 is provided obliquely at the side position fronter than the front side of an engine 3, and a suction pipe 25 at the downstream of the intercooler 19 is arranged to cross in front of the engine 3, as well as the running wind passing through the intercooler 19 is made to blow against the front side of the engine 3.



#### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]